NWS FORM E-5	U.S. DEPARTMENT OF COMMERCE	HYDROLOGIC SERVICE AREA (HSA)		
(11-88)	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	<b>)</b> N		
(PRES. BY WSOM E-41	NATIONAL WEATHER SERVICE	San Angelo, TX		
MONTHLY	REPORT OF RIVER AND FLOOD CONDITIONS	REPORT FOR: MONTH <b>December</b>	YEAR <b>1999</b>	
TO:	Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service	SIGNATURE  Amy McCullough  In Charge of HSA		
	1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	DATE January 10, 1999	)	
	ig occurs, include miscellaneous river conditions, such as signi and hydrologic products issued (WSOM E-41).	ficant rises, record lov	v stages, ice conditions, sn	OW

**X** No flood stages were reached in this HSA for the month above.

The month of December was a dry end to a dry year across West Central Texas. Rainfall remained well below normal for most areas. There were a few light rainfall events during the month, and no river flooding or flash flooding occurred. The most significant rainfall event occurred on December 11<sup>th</sup> through the12<sup>th</sup>. On the 11<sup>th</sup>, scattered thunderstorms moved northeastward across the Heartland and Northwest Hill Country, associated with an upper level low pressure system that moved across the area. Most of the rain fell in the in the Llano and San Saba river basins. A few locations across northwestern Mason, eastern McCulloch and western San Saba counties received up to 1 ½ inches of rain. The rest of the area averaged 1/4 inch of rain or less. On December 12<sup>th</sup>, scattered showers and thunderstorms moved across the eastern Concho Valley, mainly across Concho County. Isolated rainfall amounts near 2 inches occurred between Paint Rock and Eden. The rest of the month saw very light rainfall events with less than 1/10 inch of rain.

For December, San Angelo received only 0.09 inches of rain, which is 0.70 inches below normal. San Angelo ended the year well below normal, with only 13.52 inches of rainfall. This is 6.93 inches below normal. Abilene received 0.35 inches of rainfall in December, which was 0.68 inches below normal. Abilene ended the year with 16.67 inches of rain, which is 7.73 inches below normal. Soil moisture remains very low, rivers are flowing at or below baseflow, and reservoirs are well below normal levels. The outlook for the next few months does not look good, with rainfall expected to continue below normal levels.

Products Issued:

Daily River Summary (LBBRVASJT) 30

## **Annual Recap**

The well below normal rainfall across West Central Texas for 1999 continues a dry period that began with 1998. San Angelo ended 1999 with a little more rain than the previous year (13.52" vs. 12.98"), but it was not enough to make a difference in area reservoir levels. Two dry years in a row has taken a toll on the lakes across West Central Texas. The table on the following page shows area reservoir levels from June 1997 and December 1999.

Reservoir	June 1997 (ft)	December 1999 (ft)	Normal or Spillway
Twin Buttes	1919.8	1892.76	1940.0
O. C. Fisher	1878.29	1867.19	1908.0
E. V. Spence	1862.04	1843.05	1898.0
O. H. Ivie	1552.1	1537.1	1551.0
Lake Brownwood	1426.5	1416.9	1425.1
Oak Creek Lake	2000.7	1984.1	2000.0
Brady Creek	1738.6	1727.9	1743.0

The beginning of 1999 was dry for the area, with February being extremely dry. Several rainfall stations reported no rain in February. Rainfall picked up in the Spring, with March ending above normal, April and May slightly below normal, and June well above normal. Heavy rains in June caused some river flooding in the Colorado River and Middle Concho River. San Angelo recorded the 9<sup>th</sup> wettest June rainfall in 1999. By the end of June, rainfall prospects looked promising across much of West Central Texas, with several areas slightly above normal for the year. However, the situation changed rapidly, as the last half of the year saw very little rain. August 1999 was the fourth driest August on record for San Angelo, and a big change from just 2 months earlier. The following table shows rainfall for 1999 across West Central Texas. The percentage value in the Jan - June column represents the percent of the total 1999 rainfall that occurred in those months. The percentage value in the annual rainfall column shows the percent of normal for the entire year.

Location	Jan - June Rainfall (Percent of total 1999)	1999 Annual Rainfall (percent of normal)	Normal Rainfall
San Angelo	11.04 (81.7 %)	13.52 (66.1 %)	20.45
Abilene	12.58 (75.5 %)	16.67 (68.3 %)	24.40
Anson	15.12 (80.8%)	18.72 (72.6 %)	25.77
Ballinger 2NW	11.24 (72.3 %)	15.55 (66.7 %)	23.30
Brownwood	18.17 (78.4 %)	23.18 (85.0 %)	27.27
Coleman	14.50 (71.9 %)	20.18 (72.2 %)	27.95
Funk Ranch (Irion Co)	12.80 (74.2 %)	17.25 (84.2 %)	20.48
Haskell	15.18 (75.9 %)	20.00 (76.6 %)	26.12
Menard	12.97(74.2 %)	17.49 (71.9 %)	24.33
Ozona 1 SSW	11.63 (92.8 %)	12.53 (65.1 %)	19.24
Rotan	13.27 (68.6 %)	19.34 (79.8 %)	24.25
Sonora	10.75 (76.7 %)	14.02 (62.7 %)	22.36
Sterling City	7.19 (75.7 %)	9.50 (46.9 %)	20.27
Taylor Ranch (San Saba Co.)	12.73 (75.6 %)	16.83 (64.0 %)	26.28